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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,999	10/30/2003	Hideobu Kamizono	Q77868	5659

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EXAMINER

DINH, DUC Q

ART UNIT	PAPER NUMBER
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2629

MAIL DATE	DELIVERY MODE
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06/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/695,999	Applicant(s) KAMIZONO, HIDENOBU	
	Examiner DUC Q. DINH	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U. S. C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mato, Jr. (U.S Patent No. 6,204,839), hereinafter Mato.

In reference to claim 1, Mato teaches in Fig. 1, a keyboard device (12) for key inputting, the keyboard device comprising:

a sensor (sensing system 60) which detects a hand of a user or proximity of the hand related to the keys of the keyboard (sensing system 60 which is utilized to monitor changes in the proximity of a user's fingers to each of the transceiver pad , as the fingers operative depress overlaying keys associated with the pads, and use this sensed proximity change to generated keystroke and cursor control signals 62 to the circuit 40 (Fig. 5) which, in turn, output appropriate keystroke and cursor activation signals 64; see col. 5, lines 30-40; furthermore, Mato teaches the system may be automatically switched by appropriately structuring the digital circuitry 68 to distinguish, via the analog circuit output signals 74 received thereby, between a

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typing mode, i.e., when the keys 52 are being sequentially struck without substantial hand movement over the keyboard, and a cursor control mode in which the user's hand is moving across the top of the keyboard (such as in FIG. 6) without operatively striking the keys; col. 8, lines 14-22);

a microcomputer 40 (Fig. 5) which select one of two functions, the two functions both being performed by certain keys on the keyboard (key 52 in the typing mode used for inputting character; col. 7, lines 1-22 and in pointing mode use for moving cursor on screen and selecting icons; col. 7, line 50 – col. 8, line 10).

Mato does not expressly teach that the sensor detects the hands of a user at the home position. However, home position is the position, which the user has his hand on the keyboard when he starts typing. As indicated above, Mato teaches that when multiple fingers is detected by the sensor, when the keys 52 are being sequentially struck without substantial hand movement over the keyboard, and a cursor control mode in which the user's hand is moving across the top of the keyboard (col. 8, lines 14-22). Therefore, the multiple fingers detected by the sensor system 60 would be detected when the user is about to start typing (i.e., when the hand on home position).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that, when the multiple fingers are detected by the sensing system 60, the user would have his fingers in the home position because such position is usually the normal position which is taking by the user when he starts typing. Such position facilitates and expedites the typing on the keyboard.

In reference to claim 12, claim is a broader version of claim 1 and is analyzed as previously discussed with respect to claim 1.

In reference to claim 3, Mato discloses a keyboard device for key inputting by selecting one of two functions, both of the two functions being performed by certain keys on a keyboard (see discussion and analyzing as the rejection of claim 1);

a sensor for detecting a presence of a hand of a user at a home position (see rejection of claim 1);

a function switching key (104) to select one of the two functions, which are performed by said certain keys (col. 6, lines 51-56);

a sensor validating/invalidating switch (digital circuitry 68; Fig. 5) to changeover the validation/invalidation of the detection of the result of said sensor;

a control section (40 in Fig. 5) for selecting said function according to the detection result of said sensor when said sensor validating/invalidating switch is validated, and by said function switching key when said validating/invalidating switch is invalidated (when switch 104 is activated it transmits a signal 106 to the digital circuitry 68, i.e. to validate the switching to changeover the pointing mode for the device; see FIG. 5) which operates to place the capacitance system 60 in its cursor control mode. When the switch 104 is de-activated, i.e. invalidate the pointing mode, the signal 106 terminates and the system 60 returns to its typing mode; col. 6, lines 56-63 and col. 7, lines 50-65).

4. Claims 2, 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mato in view of Chiang (5,973,622).

In reference to claims 2, 4 and 13, as discussed above, Mato teaches all the limitations except the citation that the certain keys are ten-key section provided with numeric input function and cursor shift function.

However, Chiang discloses a conventional keyboard having a ten-key section can be switched between numeric keypad function and a cursor shift function (col. 1, lines 26-33 of Chiang)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Mato keyboard device using Chiang's teaching of having only the numerical-key section (ten-key section) switches between the two functions (numeric input and cursor shift input), because the numeric keypad is seldom used and thereby allowing only the numerical key section to be switched between the two functions, the rest of the keys in the keyboard will be free to be used for typing while the numerical key section is used for cursor positioning increase the speed and the efficiency of data entry.

Response to Arguments

5. Applicant's arguments with respect to claim 1-4 and 12-14 have been considered but are moot in view of the new ground(s) of rejection.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH
Examiner
Art Unit 2629

